

Amendments to the Specification:

The paragraph beginning at Page 4, lines 1-2, is to be amended as follows:

Figure 7 is a plan view of the underside of a base molding of the cartridge revealing a number of printing fluid conduits.

The paragraphs beginning at Page 7, lines 13-23, are to be amended as follows:

The purpose of the pressurized air is to prevent degradation of the printhead by keeping its nozzles free of dust and debris. The pressurized air is provided by an air compressor (item 122 of ~~Figure 13~~ Figure 3) incorporated into cradle 4. An air nozzle (item 124 of ~~Figure 13~~ Figure 3) of the compressor pierces air seal 44 upon insertion of cartridge 6 into cradle 4 and mates with air inlet port 76. An air coverplate 54 is fixed to the cartridge base molding and evenly distributes air across printhead 52 in the manner described above.

Power and data signals are provided to printhead 52 by means of busbar ~~56~~ which 56 which is in turn coupled to external data and power connectors 58A and 58B. An authentication device in the form of a quality assurance (QA) chip 57 is mounted to connector 58A. Upon inserting print cartridge 6 into cradle 4 the data and power connectors 58A and 58B, and QA chip 57, mate with corresponding connectors (items 84A, 84B of Figure 3) on cradle 4, thereby facilitating power and data communication between the cradle and the cartridge. QA chip 57 is tested in use by a portion of controller board 82 configured to act as a suitable verification circuit.

The paragraph beginning at Page 8, lines 28-29, is to be amended as follows:

The ink jet printhead chip 52 (see Fig. 6) includes a silicon wafer substrate ~~801~~ 8015. 0.35 Micron 1 P4M 12 volt CMOS microprocessing circuitry is positioned on the silicon wafer substrate 8015.

The paragraph beginning at Page 13, lines 4-8, is to be amended as follows:

With reference to Figure 25, drive shaft ~~127~~ of motor 110 terminates in a worm gear 129 that meshes with a cog ~~125B-125~~ that is, in turn, fixed to drive roller 96. Referring again to Figure 26, the drive roller is supported at either end by bearing mount assemblies 100A and 100B, which are in turn fixed into slots 101A and 101B of cradle mounting 80 (see also Fig. 30). Similarly, rotor element translation roller 94 and pinch roller 98 are also supported by bearing mount assemblies 100A and 100B.

The paragraph beginning at Page 15, lines 21-23, is to be amended as follows:

Referring now to ~~Figure 4~~ Figure 34, from the highest point of view a SoPEC device consists of 3 distinct subsystems: a Central Processing Unit (CPU) subsystem 301, a Dynamic Random Access Memory (DRAM) subsystem 302 and a Print Engine Pipeline (PEP) subsystem 303.

The paragraph beginning at Page 23, lines 22-27, is to be amended as follows:

As can be seen in Figure 27, the inner walls of recess 89 form a seat or shelf upon which cartridge 6 rests after insertion. A number of resilient members in the form of springs ~~190-194~~ are provided to act against the cartridge as it is brought into position and also against the retainer catch, as it is locked over the cartridge. Consequently the springs act to absorb shocks during insertion and then to hold the cartridge fast with the cradle 4 and latch 7 by securely ~~bias~~biasing the cartridge in place against the latch. In an alternative the springs might instead be located on latch 7 in which case cartridge 6 would be biased against cradle 4.

The paragraph beginning at Page 25, lines 1-11, is to be amended as follows:

Subsequent to detecting a print command at USB port 130 and confirming the presence of print media, controller board 82 drives motor 110 so that drive roller 96 begins to rotate and, in cooperation with pinch roller 98, draws the print media past printhead 52. Simultaneously, controller board 82 processes print data from the external computational device in order to generate control signals for printhead 52. The control signals are applied to the printhead via cradle interfaces 84A, 84B, carriage interfaces 58A, 58B ~~and flex and~~flex PCB contacts at either end of printhead chip 52. Printhead chip 52 is bilithic, i.e. has two elongate chips that extend the length of the printhead, data is provided at either end of the printhead where it is transferred along the length of each chip to each individual nozzle. Power is provided to the individual nozzles of the printhead chips via the busbars that extend along the length of the chips. In response to received data and power, the individual nozzles of the printhead selectively eject ink onto the print media as it is drawn over the platen face of rotor element 60 thereby printing the image encoded in the data signal transmitted to USB port 130.

The paragraph beginning at Page 27, lines 6-12, is to be amended as follows:

As shown in Fig. 41, when ink refill cartridge 160 is docked in refill port 8 of cartridge unit 6, ink outlet pin ~~28-182~~ penetrates sealing film 40 and one of apertures 42A-42E of the refill port to communicate with a corresponding one of ink inlets 24. Ink inlet 24 is provided as an elastomeric molding so that penetration of ink seal 32, which is located over ink refill cartridge outlet pin ~~28-182~~, occurs automatically. As a consequence, self-sealing fluid communication is ensured between the ink stored in refill cartridge 160, ink delivery conduits 43A-43E and storage reservoirs 28-34. The self-sealing fluid communication results in a pressurised fluid flow of ink into one of reservoirs 28, 30, 32, 34 occurring upon outer molding 162 being depressed.